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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER
MURRAY, DANIEL C

ART UNIT	PAPER NUMBER
2443	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary	Application No.	Applicant(s)	
	10/616,051	OMAE ET AL.	
	Examiner	Art Unit	
	DANIEL C. MURRAY	2443	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 June 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Action is in response to Applicant's amendment filed on 08JUN2010. **Claims 1-24** are now pending in the present application. **This Action is made FINAL.**

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made

in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. **Claims 1-24** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Segal (US Patent Publication # US 20030128693 A1)** in view of **Iyer et al. (US Patent # US 7,058,706 B1).**

a) Consider **claim 1,** Segal clearly shows and discloses, a node search method for searching for a plurality of new service nodes for providing services to a mobile node, in a mobile communication system including a plurality of service nodes and the mobile node, each of the service nodes and the mobile node having a node storage unit configured to store addresses of service nodes (abstract, paragraph [0013], [0016]), the node search method comprising: transmitting a node search packet to search for the plurality of new service nodes from a search node, which searches for the plurality of new service nodes, to a search packet reception node having an address stored in the node storage unit of the search node (figure 3, paragraph [0013], [0020], [0021]); transmitting a node notice request packet from the search packet reception node to each of a plurality of peripheral nodes having addresses stored in the node storage unit of the search packet reception node, in response to receiving the node search packet, the addresses of the plurality of peripheral nodes not being stored in the node storage unit of the search node (figure 3, paragraph [0013], [0020], [0021]); returning a node notice packet from the search packet reception node to the search node, in response to receiving the node search packet (figure 3, paragraph [0013], [0020], [0021]); transmitting the node notice packet from each of the plurality of peripheral nodes to the search node, based only on a determination that the node notice request packet has been received by the respective peripheral node (figure 3, paragraph [0013], [0020], [0021]); detecting the plurality of new service nodes based on the returned node notice packets from the plurality of peripheral nodes,

by the search node (figure 3, abstract, paragraph [0013], [0020], [0021]); and updating the node storage unit of the search node based on the plurality of new service nodes detected by the search node (figure 3, abstract, paragraph [0013], [0016], [0020], [0021]). However, Segal does not specifically disclose transmitting data for investigating node information from the search node to the detected plurality of new service nodes, the data for investigating node information including a request for a delay value and a number of hops in a packet transmission between the search node and the detected plurality of new service nodes.

Iyer et al. show and disclose determining a dynamic hop count and latency between two nodes across a network in a computer environment, wherein Iyer et al. further discloses transmitting data for investigating node information from the search node to the detected plurality of new service nodes, the data for investigating node information including a request for a delay value and a number of hops in a packet transmission between the search node and the detected plurality of new service nodes (abstract, column 1 lines 65-67, column 2 lines 1-5 lines 9-27).

One of ordinary skill in the art at the time the invention was made would have been motivated to combine the teachings of Iyer et al. and Segal since both concern networked communications systems and as such, both are with in the same environment.

Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate determining the delay value and hop count, as taught by, Iyer et al. into the system of Segal et al. for the purpose of determining the number of hops and latency between two nodes, thereby allowing the determination and management of latency on the network between nodes.

b) Consider **claim 2,** Segal clearly show and disclose, a node, comprising: a node storage unit configured to store addresses of service nodes for providing a service to a mobile node (figure 3, abstract, paragraph [0013], [0016], [0020], [0021]); a search packet creation unit configured to create a node search packet to search for a plurality of new service nodes (figure 3, paragraph [0013], [0020], [0021]); a communication unit configured to transmit the node search packet to a search packet reception node having an address stored in the node storage unit (figure 3, paragraph [0013], [0020], [0021]), to receive a node notice packet transmitted from the search packet reception node in response to receiving the node search packet (figure 3, paragraph [0013], [0020], [0021]), and to receive the node notice packet from each of a plurality of peripheral nodes which receives a node notice request packet from the search packet reception node (figure 3, paragraph [0013], [0020], [0021]), addresses of the plurality of peripheral nodes not being stored in the node storage unit and each of the plurality of peripheral nodes being configured to transmit the node notice packet to the node based only on a determination that the node notice request packet has been received by the respective peripheral node (figure 3, abstract, paragraph [0013], [0016], [0020], [0021]); a detection unit configured to detect the plurality of new service nodes based on the node notice packets returned from the plurality of peripheral nodes (figure 3, abstract, paragraph [0013], [0016], [0020], [0021]); and an update unit configured to update the node storage unit based on the plurality of new service nodes detected by the detection unit (figure 3, abstract, paragraph [0013], [0016], [0020], [0021]). However, Segal does not specifically disclose the communication unit is configured to transmit, to the detected plurality of new service nodes, data for investigating node information including a request for a delay value and a number of hops in a packet transmission between the search node and the plurality of detected new service nodes.

Iyer et al. show and disclose determining a dynamic hop count and latency between two nodes across a network in a computer environment, wherein communication unit is configured to transmit, to the detected plurality of new service nodes, data for investigating node information including a request for a delay value and a number of hops in a packet transmission between the search node and the plurality of detected new service nodes (abstract, column 1 lines 65-67, column 2 lines 1-5 lines 9-27).

One of ordinary skill in the art at the time the invention was made would have been motivated to combine the teachings of Iyer et al. and Segal since both concern networked communications systems and as such, both are with in the same environment.

Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate determining the delay value and hop count, as taught by, Iyer et al. into the system of Segal et al. for the purpose of determining the number of hops and latency between two nodes, thereby allowing the determination and management of latency on the network between nodes.

c) Consider **claim 3,** and **as applied to claim 2 above,** Segal as modified by Iyer et al. clearly show and disclose, the node of claim 2, further comprising: a data creation unit configured to create the data for investigating node information detected by the detection unit, the data being transmitted to the detected plurality of new service nodes (Segal; abstract, paragraph [0013], [0016]), wherein the node storage unit is configured to store the node information (Segal; figure 3, abstract, paragraph [0013], [0016], [0020], [0021]), the communication unit is configured to transmit the data created by the data creation unit, and to receive response data returned in response to the data by the detected plurality of new service nodes (Segal; figure 3, paragraph [0013], [0016], [0020], [0021]), and the update unit is configured to update the node storage unit based on the returned response

data (Segal; figure 3, abstract, paragraph [0013], [0016], [0020], [0021]).

d) Consider **claim 4,** and **as applied to claim 2 above,** Segal as modified by Iyer et al. clearly show and disclose, the node of claim 2, wherein node information concerning the plurality of new service nodes are included in the node notice packets (Segal; figure 3, paragraph [0013], [0020], [0021]), the node storage unit is configured to store the node information (Segal; figure 3, abstract, paragraph [0013], [0016], [0020], [0021]), and the update unit is configured to update the node storage unit based on the returned node notice packets (Segal; figure 3, abstract, paragraph [0013], [0016], [0020], [0021]).

e) Consider **claim 5,** and **as applied to claim 3 above,** Segal as modified by Iyer et al. clearly show and disclose, the node of claim 3, wherein the node storage unit is configured to store the addresses of the service nodes and the node information according to a predetermined criterion (Segal; paragraph [0013], [0016], [0020], [0021]).

f) Consider **claim 6,** and **as applied to claim 4 above,** Segal as modified by Iyer et al. clearly show and disclose, the node of claim 4, further comprising: a determination unit configured to determine inter-node information between the search node and the plurality of peripheral nodes according to inter-node information between the search node and the search packet reception node and inter-node information between the search packet reception node and the plurality of peripheral nodes based on the node notice packets (Segal; figure 3, abstract, paragraph [0013], [0016], [0020], [0021]), wherein the update unit is configured to update the node storage unit based on the inter-node information between the search node and the plurality of peripheral nodes determined by the determination unit (Segal; figure 3, abstract, paragraph [0013], [0016], [0020], [0021]).

g) Consider **claim 7,** and **as applied to claim 2 above,** Segal as modified by Iyer et al. clearly show and disclose, the node of claim 2, further comprising: a notice packet creation unit

configured to create the node notice packet by accessing the node storage unit (Segal; figure 3, paragraph [0013], [0020], [0021]), wherein the communication unit is configured to transmit the node notice packet created by the notice packet creation unit (Segal; figure 3, paragraph [0013], [0020], [0021]).

h) Consider **claim 8,** and **as applied to claim 7 above,** Segal as modified by Iyer et al. clearly show and disclose, the node of claim 7, wherein the notice packet creation unit is configured to create the node notice packet that is passed through the plurality of peripheral nodes (Segal; figure 3, paragraph [0020], [0021]).

i) Consider **claim 9,** and **as applied to claim 7 above,** Segal as modified by Iyer et al. clearly show and disclose, the node of claim 7, wherein the notice packet creation unit is configured to create the node notice packet when the communication unit has received at least one of the node search packet, the node notice packet, and the node notice request packet for requesting return of the node notice packet (Segal; figure 3, abstract, paragraph [0013], [0016], [0020], [0021]).

j) Consider **claim 10,** and **as applied to claim 2 above,** Segal as modified by Iyer et al. clearly show and disclose, the node of claim 2, further comprising: a request packet creation unit configured to create the node notice request packet for requesting the plurality of peripheral nodes to return the node notice packets (Segal; figure 3, paragraph [0013], [0016], [0020], [0021]), wherein the communication unit is configured to transmit the node notice request packet created by the request packet creation unit (Segal; figure 3, paragraph [0013], [0020], [0021]).

k) Consider **claim 11,** and **as applied to claim 10 above,** Segal as modified by Iyer et al. clearly show and disclose, the node of claim 10, wherein the request packet creation unit is configured to create the node notice request packet when the communication unit has received at least one of the node search packet, the node notice packet, and the node notice request packet

(Segal; figure 3, abstract, paragraph [0013], [0016], [0020], [0021]).

l) Consider **claim 12,** and **as applied to claim 2 above,** Segal as modified by Iyer et al. clearly show and disclose, the node of claim 2, further comprising: a request packet creation unit configured to create a node registration request packet for requesting registration in the node storage unit of another service node (Segal; figure 3, paragraph [0013], [0016], [0020], [0021]), wherein the communication unit is configured transmit the node registration request packet created by the request packet creation unit (Segal; figure 3, paragraph [0013], [0020], [0021]).

m) Consider **claim 13,** and **as applied to claim 2 above,** Segal as modified by Iyer et al. clearly show and disclose, the node of claim 2, wherein the communication unit is configured to receive a node registration request packet for requesting registration in the node storage unit of another service node (Segal; figure 3, abstract, paragraph [0013], [0016], [0020], [0021]), and the update unit is configured to update the node storage unit based on the node registration request packet (Segal; figure 3, abstract, paragraph [0013], [0016], [0020], [0021]).

n) Consider **claim 14,** and **as applied to claim 2 above,** Segal as modified by Iyer et al. clearly show and disclose, the node of claim 2, further comprising: a selection criterion holding unit configured to hold a selection criterion for selecting a service node to be used (Segal; paragraph [0013], [0016], [0020], [0021]); and a selection unit configured to access the node storage unit and to select the service node to be used, based on the selection criterion held in the selection criterion holding unit (Segal; paragraph [0013], [0016], [0020], [0021]).

o) Consider **claim 15,** Segal clearly show and disclose, a mobile communication system, comprising: a search node configured to search for a plurality of new service nodes for providing services to a mobile node by transmitting a node search packet in order to search for the plurality of new service nodes (figure 3, abstract, paragraph [0013], [0016], [0020], [0021]); a search packet

reception node configured to receive the node search packet transmitted from the search node (figure 3, paragraph [0013], [0020], [0021]); and a plurality of peripheral nodes other than the search packet reception node (figure 3, paragraph [0020], [0021]), wherein the search node includes a node storage unit configured to store addresses of service nodes (figure 3, abstract, paragraph [0013], [0016], [0020], [0021]); a search packet creation unit configured to create the node search packet to search for the plurality of new service nodes (figure 3, paragraph [0013], [0020], [0021]); a communication unit configured to transmit the node search packet to the search packet reception node having an address stored in the node storage unit (figure 3, paragraph [0013], [0020], [0021]), to receive a node notice packet transmitted from the search packet reception node in response to receiving the node search packet (figure 3, paragraph [0013], [0020], [0021]), and to receive the node notice packet from each of the plurality peripheral nodes which receives a node notice request packet from the search packet reception node (figure 3, paragraph [0013], [0020], [0021]), addresses of the plurality of peripheral nodes not being stored in the node storage unit and the plurality of peripheral nodes being configured to transmit the node notice packet to the search node based only on a determination that the node notice request packet has been received by the respective peripheral node (figure 3, abstract, paragraph [0013], [0016], [0020], [0021]); a detection unit configured to detect the plurality of new service nodes based on the node notice packets returned from the plurality of peripheral nodes (figure 3, abstract, paragraph [0013], [0020], [0021]); and an update unit configured to update the node storage unit based on the new service node detected by the detection unit (figure 3, abstract, paragraph [0013], [0016], [0020], [0021]). However, Segal does not specifically disclose the communication unit is configured to transmit, to the detected plurality of new service nodes, data for investigating node information including a request for a delay value

and a number of hops in a packet transmission between the search node and the detected plurality of new service nodes.

Iyer et al. show and disclose determining a dynamic hop count and latency between two nodes across a network in a computer environment, wherein the communication unit is configured to transmit, to the detected plurality of new service nodes, data for investigating node information including a request for a delay value and a number of hops in a packet transmission between the search node and the detected plurality of new service nodes (abstract, column 1 lines 65-67, column 2 lines 1-5 lines 9-27).

One of ordinary skill in the art at the time the invention was made would have been motivated to combine the teachings of Iyer et al. and Segal since both concern networked communications systems and as such, both are with in the same environment.

Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate determining the delay value and hop count, as taught by, Iyer et al. into the system of Segal et al. for the purpose of determining the number of hops and latency between two nodes, thereby allowing the determination and management of latency on the network between nodes.

p) Consider **claim 16,** Segal clearly shows and discloses, a non-transitory computer-readable storage medium, including computer executable instructions, wherein the instructions, when executed by a processor, cause the processor to function as a node and to perform a method (figure 3, paragraph [0013], [0016]), comprising: storing addresses of service nodes for providing a service to a mobile node (figure 3, abstract, paragraph [0013], [0016], [0020], [0021]); creating a node search packet to search for a plurality of new service nodes (figure 3, paragraph [0013], [0020], [0021]); transmitting the node search packet to a search packet reception node having an address stored in

the storing step (figure 3, paragraph [0013], [0020], [0021]); receiving a node notice packet transmitted from the search packet reception node in response to receiving the node search packet (figure 3, paragraph [0013], [0020], [0021]); receiving the node notice packet from each of a plurality of peripheral nodes which receives a node notice request packet from the search packet reception node (figure 3, paragraph [0013], [0020], [0021]), addresses of the plurality of peripheral nodes not being stored in the node storage unit and each of the plurality of peripheral nodes being configured to transmit the node notice packet to the node based only on a determination that the node notice request packet has been received by the respective peripheral node (figure 3, abstract, paragraph [0013], [0016], [0020], [0021]); detecting the plurality of new service nodes based on the node notice packets returned from the plurality of peripheral nodes (figure 3, abstract, paragraph [0013], [0020], [0021]); and updating the addresses based on the detected plurality of new service nodes (figure 3, abstract, paragraph [0013], [0016], [0020], [0021]). However, Segal does not specifically disclose transmitting to the detected plurality of new service nodes, by the search node, data for investigating node information including a request for a delay value and a number of hops in a packet transmission between the search node and the detected plurality of new service nodes.

Iyer et al. show and disclose determining a dynamic hop count and latency between two nodes across a network in a computer environment, wherein Iyer et al. discloses transmitting to the detected plurality of new service nodes, by the search node, data for investigating node information including a request for a delay value and a number of hops in a packet transmission between the search node and the detected plurality of new service nodes (abstract, column 1 lines 65-67, column 2 lines 1-5 lines 9-27).

One of ordinary skill in the art at the time the invention was made would have been motivated to combine the teachings of Iyer et al. and Segal since both concern networked communications systems and as such, both are with in the same environment.

Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate determining the delay value and hop count, as taught by, Iyer et al. into the system of Segal et al. for the purpose of determining the number of hops and latency between two nodes, thereby allowing the determination and management of latency on the network between nodes.

q) Consider **claim 17,** and **as applied to claim 1 above,** Segal as modified by Iyer et al. clearly show and disclose, the node search method of claim 1, wherein the updating step comprises updating the node storage unit to include the addresses of the plurality of new service nodes (Segal, abstract, paragraph [0013], [0020]).

r) Consider **claim 18,** and **as applied to claim 2 above,** Segal as modified by Iyer et al. clearly show and disclose, the node of claim 2, wherein the update unit is configured to update the node storage unit to include the addresses of the plurality of new service nodes (Segal, abstract, paragraph [0013], [0020]).

s) Consider **claim 19,** and **as applied to claim 15 above,** Segal as modified by Iyer et al. clearly show and disclose, the mobile communication system of claim 15, wherein the update unit is configured to update the node storage unit to include the addresses of the plurality of new service nodes (Segal, abstract, paragraph [0013], [0020]).

t) Consider **claim 20,** and **as applied to claim 16 above,** Segal as modified by Iyer et al. clearly show and disclose, the non-transitory computer-readable storage medium of claim 16, wherein the updating step comprises updating the addresses to include the addresses of the plurality

of new service nodes (Segal, abstract, paragraph [0013], [0020]).

u) Consider **claim 21,** and **as applied to claim 1 above,** Segal as modified by Iyer et al. clearly show and disclose, the node search method of claim 1, wherein the transmitting step comprises transmitting the node notice packet from one of the plurality of peripheral nodes directly to the search node (Segal, figure 3, abstract, paragraph [0020], [0021]).

v) Consider **claim 22,** and **as applied to claim 2 above,** Segal as modified by Iyer et al. clearly show and disclose, the node of claim 2, wherein the communication unit is configured to receive the node notice packet directly from one of the plurality of peripheral nodes (Segal, figure 3, abstract, paragraph [0020], [0021]).

w) Consider **claim 23,** and **as applied to claim 15 above,** Segal as modified by Iyer et al. clearly show and disclose, the mobile communication system of claim 15, wherein the communication unit is configured to receive the node notice packet directly from one of the plurality of peripheral nodes (Segal, figure 3, abstract, paragraph [0020], [0021]).

x) Consider **claim 24,** and **as applied to claim 16 above,** Segal as modified by Iyer et al. clearly show and disclose, the non-transitory computer-readable storage medium of claim 16, wherein the receiving step comprises receiving the node notice packet directly from one of the plurality of peripheral nodes (Segal, figure 3, abstract, paragraph [0020], [0021]).

Response to Arguments

6. Applicant's arguments filed 08JUN2010 have been fully considered but they are not persuasive.

Applicant argues that Segal does not disclose detecting a plurality of new service nodes, or that the detecting is based on returned node notice packets from a plurality of peripheral nodes.

The Examiner respectfully disagrees Segal clearly discloses detecting a plurality of new service nodes, or that the detecting is based on returned node notice packets from a plurality of peripheral nodes (figure 3, abstract, paragraph [0013], [0016], [0017], [0020], [0021]). Segal clearly discloses end point service node IP addresses (new service node IP addresses), associated with a set of services (services), are stored in ENUM (node storage unit/peripheral nodes) corresponding to the SAPC belonging to the local operator for a given PLMN. These end node IP addresses (new service node IP addresses) then are returned in the ENUM/DNS response (returned node notice packet) to an E.1 64-based query (node search packet/node notice request packet).

Segal clearly discloses the first scenario (FIG. 3) describes the discovery (detection) and address retrieval of an end node (new service node) residing in PLMN 1 (PLMN 500) by PLMN N (PLMN 600) via a DNS/ENUM query (node search packet/node notice request packet). This illustrates the use of ENUM (peripheral node) for mobility services operation to discover (detect) the MAP URI/node IP address (new service node address) utilizing a scheme 1 SAPC. Also, it should be noted that generally discovery/retrieval (request/response to a node search packet) of IP addresses for a service application node (new service node) can be based on any service URI specified in ENUM (peripheral node) and that generally service discovery can be based on a standard DNS/ENUM query with order and preference.

Segal clearly discloses these service applications nodes (new service nodes) can be defined by the service provider in any form or fashion, that is, a service application node's IP address (address) can be provided (stored) in the local ENUM database (peripheral node's storage unit) depending on the type of services it provides or the GT types it is capable of handling. Service providers control what services they will provide to others by storing IP addresses and service indicators in their local ENUM DBs (peripheral node storage unites). Thus, as network operators reach roaming agreements with one another, for example, they can exchange (respond to requests for new service nodes address) the relevant SAPC's stored in each of their local ENUM databases (peripheral node storage units) for the services they will provide the other.

Segal clearly discloses detecting a plurality of new service nodes (end nodes/service application nodes) and that the detecting (discovery) is based on returned node notice packets (responses) from a plurality of peripheral nodes (ENUM). Segal is clearly using service discovery as known in the art, wherein a requesting node sends out a discovery request for information regarding other (service) nodes capable of providing a particular service, which maybe pass through and be passed on by other nodes not capable of providing the service (peripheral nodes) to those (service) nodes that are and those service nodes return a discovery response containing identifying information (i.e. an IP address) if they are capable of providing this service to the requesting node.

Therefore, Segal clearly discloses detecting a plurality of new service nodes, or that the detecting is based on returned node notice packets from a plurality of peripheral nodes.

Furthermore, it is noted that mere duplication of parts has no patentable significance unless a new and unexpected result is produced (see MPEP 2144.04, Section VI, paragraph B. Duplication of Parts). Regardless of the fact that Segal does, in fact, disclose detecting a plurality of new service nodes and that the detecting is based on returned node notice packets from a plurality of peripheral

nodes merely searching for and detecting a plurality of new service nodes for providing services to a mobile node rather than searching for and detecting a single new service nodes for providing a service to a mobile node does not produce a new and unexpected result but rather creates predictable and obvious results (i.e. the return of multiple node notice packets and the detection of multiple new service nodes). Detecting a node capable of providing a service is not functionally different than detecting multiple nodes capable of providing the service using the same process and is therefore considered obvious.

The Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the Applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the Applicant, in preparing the responses, to fully consider each of the cited references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage disclosed by the Examiner.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the Applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the Applicant, in preparing the responses, to fully consider each of the cited references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage disclosed by the Examiner.

With respect to any amendments to the claimed invention, it is respectfully requested that Applicant indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

If Applicant intends to make numerous amendments the Examiner respectfully requests that Applicant submit a clean copy of the claims in addition to the marked up copy of the claims in order to expedite the examination process.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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- US 2010/0005160 A1

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL C. MURRAY whose telephone number is 571-270-1773. The examiner can normally be reached on Monday - Friday 0800-1700 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tonia Dollinger can be reached on (571)-272-4170. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. C. M./
Examiner, Art Unit 2443

/Tonia LM Dollinger/
Supervisory Patent Examiner, Art Unit 2443